

REMARKS

By the above amendments, applicant has amended claims 1, 9, 14, and 18-21. In addition, applicant has canceled claims 3-8, 12, 13, 15, and 16 without prejudice. Furthermore, applicant has added new claims 22-27, which are believed to patentably define the present invention over the applicable reference cited.

Applicant asserts that no new matter is added.

Applicant respectfully submits that all the pending claims are now placed in position for allowance, and that the new claims are also placed in position for allowance. Detailed reasons for allowance are as follows:

Claim Objections

Claims 14-17 and 19-20 are objected to because of informalities.

In response to the objections, applicant has removed "the first generating parameters" from claim 14.

Claims 15 and 16 have been cancelled.

Regarding claim 17, applicant has replaced "the second traffic generating parameters" with the term "second traffic generating parameters".

Regarding claim 19, applicant has replaced the term "further includes a step" with the term "further comprising". Regarding claim 18, applicant has added the term "the simulation test parameters comprise first traffic generating parameters", so there is a reference in support of the use of the term "second traffic generating parameters" in claim 19.

Regarding claim 20, applicant has replaced the term "step b) further

comprises" with the term "further comprising", and the term "the designed network simulating model" with the term "the network simulating model".

Thus, it is believed that the objections are now overcome.

Claim Rejections under 35 U.S.C. 103

Claims 1-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Piesco (USPG_PUB No. 2003/0212908), in view of Nakamoto et al. (USPG_PUB No 2004/0088605).

In response

With regard to amended claim 1, this recites that a network testing apparatus comprises a plurality of communication ports, a software module, and a hardware module. The software module comprises a network simulating database for storing a plurality of network simulating models, a network protocol database for storing a plurality of network protocols, a simulation processing module, and a traffic generation controlling module. The simulation processing module is for selecting a network simulating model and a network protocol and generating a first traffic generating command when the network testing apparatus is in a network simulating test mode. The traffic generation controlling module is for generating a second traffic generating command when the network testing apparatus is in a traffic generator operating mode. The hardware module comprises a traffic generating apparatus and a media access control. The traffic generating apparatus is for generating corresponding traffic according to the first traffic command or the second traffic generating command. The media access control is for transmitting the generated traffic to a corresponding communication port.

Applicant would like to emphasize that Piesco fails to show or disclose the network protocol database for storing a plurality of network protocols, the function of the simulation processing module, the function of the traffic generation controlling module, the function of the traffic generating apparatus, and the media access control.

In particular, Piesco essentially discloses that a data repository 11 collects and stores various types of data that are related to real-time network modeling and simulation (see FIG. 1; also pg. 2, [0016]). Examiner has characterized the data repository 11 as being the network simulating database and the network protocol database recited in claim 1. However, the data repository 11 does not include a plurality of network protocols, whereas the network protocol database comprises the plurality of network protocols recited in claim 1. Accordingly, the network simulating database and the network protocol database recited in claim 1 are submitted to be different from the data repository 11 disclosed by Piesco.

In addition, Piesco essentially discloses a traffic generation module 13 and a modeling & simulation module 15. Examiner has characterized the modeling & simulation module 15 as being the simulation processing module, and the traffic generation module 13 as being the traffic generation controlling module and the traffic generating apparatus. However, the modeling & simulation module 15 does not have the function of selecting a network simulating model and a network protocol and generating a first traffic generating command when the network testing apparatus is in a network simulating test mode. The traffic generation module 13 does not have the function of generating a second traffic generating command when the network testing apparatus is

in a traffic generator operating mode, and the function of generating corresponding traffic according to the first traffic command or the second traffic generating command. Accordingly, the simulation processing module recited in claim 1 is submitted to be different from the modeling & simulation module 15 disclosed by Piesco. The traffic generation controlling module and the traffic generating apparatus recited in claim 1 are submitted to be different from the traffic generation module 13 disclosed by Piesco.

Furthermore, Piesco fails to disclose or show the media access control or the function of the media access control.

Moreover, Nakamoto et al. essentially discloses a networking system 110 in a system for testing networking systems. Embodiments of the invention are implemented to test networking systems 110. A networking system, such as a network switch, for example, inspects each packet for its destination and transmits each packet through the appropriate physical port 115 associated with the network route to its destination identified by its address (see FIGS. 1-6; also pg. 2, [0021]). As disclosed by Nakamoto et al., the networking system 110 includes multiple physical ports 115, and can transmit packets through the appropriate physical ports 115 in order to be tested. However, as recited in claim 1, the network testing apparatus transmits the generated traffic to a corresponding communication port in order to perform a network test. Thus, the purpose of transmitting traffic to its corresponding port recited in claim 1 is submitted to be different from the purpose of transmitting traffic to its corresponding port disclosed by Nakamoto et al.

For these reasons, Applicant respectfully submits that it would not

have been obvious to one with skill in the art to modify the invention of Piesco such that it further comprises a teaching wherein a computer component transmits packets through the appropriate ports 115, as taught by Nakamoto et al. Moreover, even assuming that one with skill in the art would have been motivated to combine Piesco with Nakamoto et al., the resulting product would still be different from that of the present invention. The references taken as a whole fall short of suggesting the invention of claim 1. That is, the network testing apparatus of claim 1 is unobvious and patentable over Piesco in view of Nakamoto et al. under 35 U.S.C. 103.

Claims 2 and 22-25 are dependent on claim 1. That is, all the limitations of claim 1 are incorporated in claim 2 and 22-25. Therefore claim 2 and 22-25 should now also be allowable over Piesco in view of Nakamoto et al. under 35 U.S.C. 103.

With regard to claim 9, applicant respectfully traverses the rejection for reasons similar to those asserted above in relation to claim 1, and also for the following reason:

Both Piesco and Nakamoto et al. fail to show or disclose that at least one administrative workstation comprises a simulation test controlling module and a traffic generation parameter designing module. The simulation test controlling module is for selecting simulation test parameters and transmitting the simulation test parameters. The traffic generation parameter designing module is for inputting second traffic generation parameters and transmitting the second traffic generating parameters. For all the above reasons, the network testing system of claim 9 is unobvious and patentable over Piesco in view of Nakamoto et al. under 35 U.S.C. 103.

Claims 10, 11, 14, 17, and 26-27 are dependent on claim 9. That is, all the limitations of claim 9 are incorporated in claims 10, 11, 14, 17, and 26-27. Therefore claims 10, 11, 14, 17, and 26-27 should also now be allowable over Piesco in view of Nakamoto et al. under 35 U.S.C. 103.

With regard to claim 18, this recites that a network testing method comprises setting the network testing apparatus in a network simulating test mode or a traffic generator operating mode; setting simulation test parameters, and transmitting the simulation test parameters when the simulation testing apparatus is set in the simulating test mode, wherein the simulation test parameters comprise first traffic generating parameters; and receiving the simulation test parameters, selecting a network simulating model and a network protocol according to the simulation test parameters, and controlling traffic generation to perform a network simulation test.

Applicant would like to emphasize that both Piesco and Nakamoto et al. fail to show or disclose the network testing method or the steps of the network testing method recited in claim 18.

In particular, Piesco essentially discloses a method for simulating a computer network. The method comprises acquiring physical network components from a hardware inventory and simulated network components from a software library; configuring said acquired physical network components; configuring said acquired simulated network components; and performing computer network security tests on said simulated computer network in real-time (Piesco FIGS. 1-4; also pgs. 1-3, [0015-0030]).

Nakamoto essentially discloses a method for testing networking

systems performance. The method comprises obtaining user configuration data; generating configuration information for at least one testing device; generating network traffic data; applying said network traffic data to said at least one networking systems; capturing a test result of said at least one networking system; and communicating said test result (see Nakamoto et al. FIGS. 1-6; also pgs. 2-4, [0017-0043]).

For the above described differences, the network testing method of claim 18 is unobvious and patentable over Piesco in view of Nakamoto et al. Applicant submits that the burden of proof required by Examiner is fulfilled, and that claim 18 should be allowable over Piesco in view of Nakamoto et al. under 35 U.S.C. 103.

Claims 19-21 are dependent on claim 18. That is, all the limitations of claim 18 are incorporated in claims 19-21. Therefore claims 19-21 should also now be allowable over Piesco in view of Nakamoto et al. under 35 U.S.C. 103.

In view of the above amendments and remarks, the subject application is believed to be in a condition for allowance, and an action to such effect is earnestly solicited.

Respectfully submitted,

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